STATE OF MARYLAND

DHMH

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# August 27, 2010

# Public Health & Emergency Preparedness Bulletin: # 2010:33
# Reporting for the week ending 08/21/10 (MMWR Week #33)

**CURRENT HOMELAND SECURITY THREAT LEVELS**

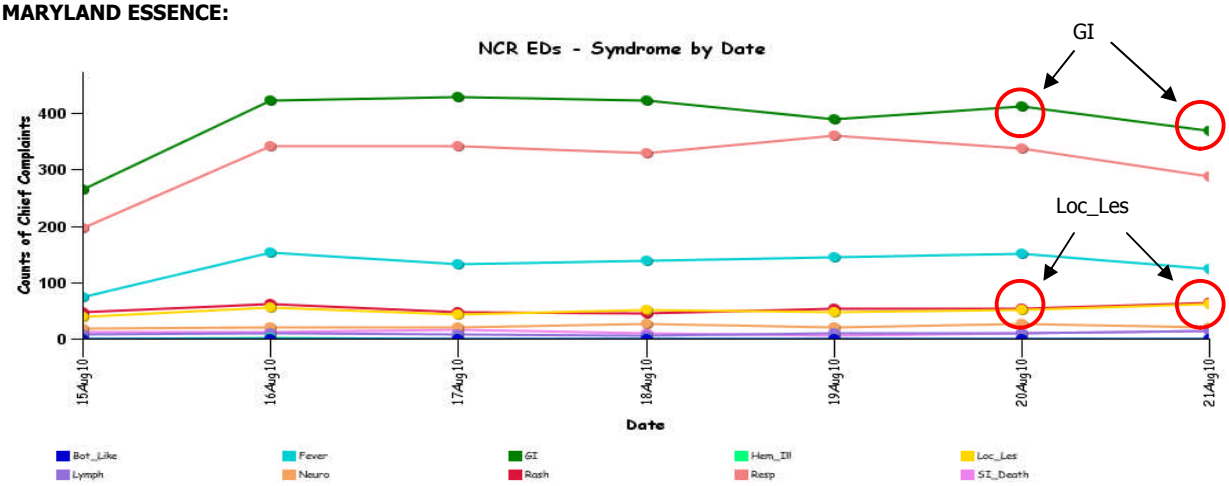
**National:** **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
**Maryland:** **Yellow (ELEVATED)**

**SYNDROMIC SURVEILLANCE REPORTS**

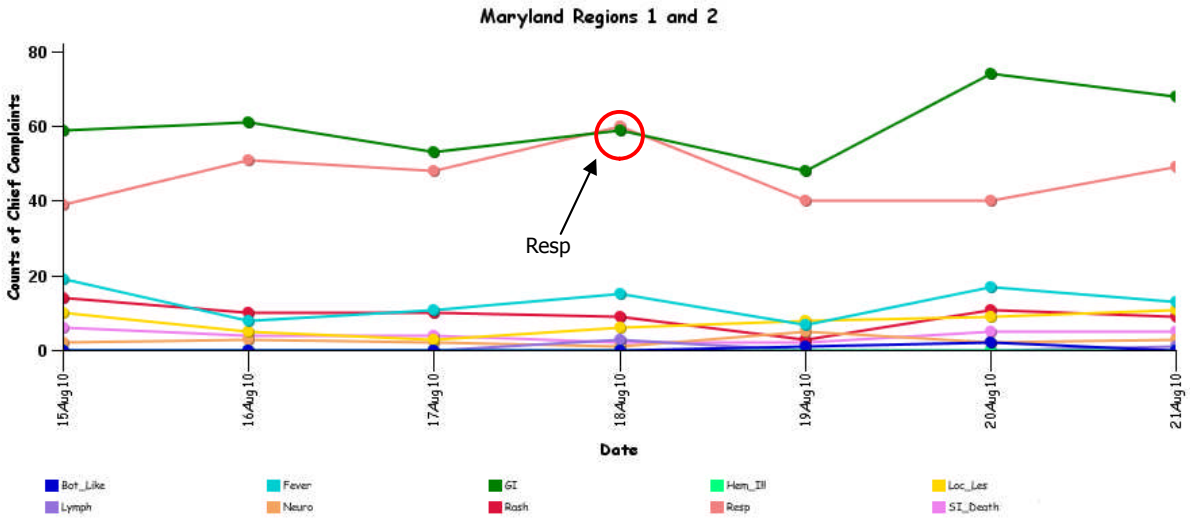
**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

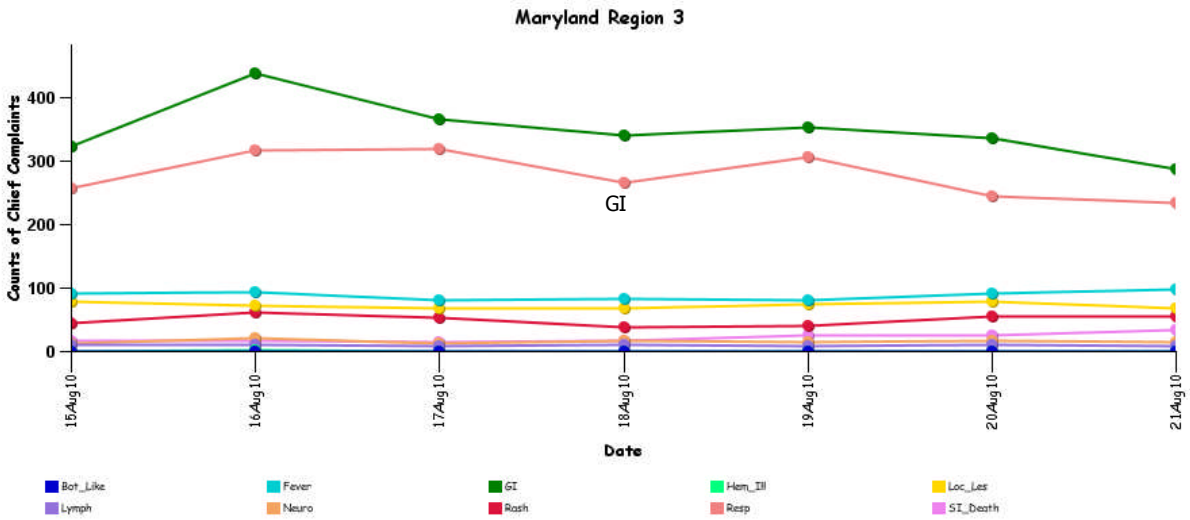
**MARYLAND ESSENCE:**



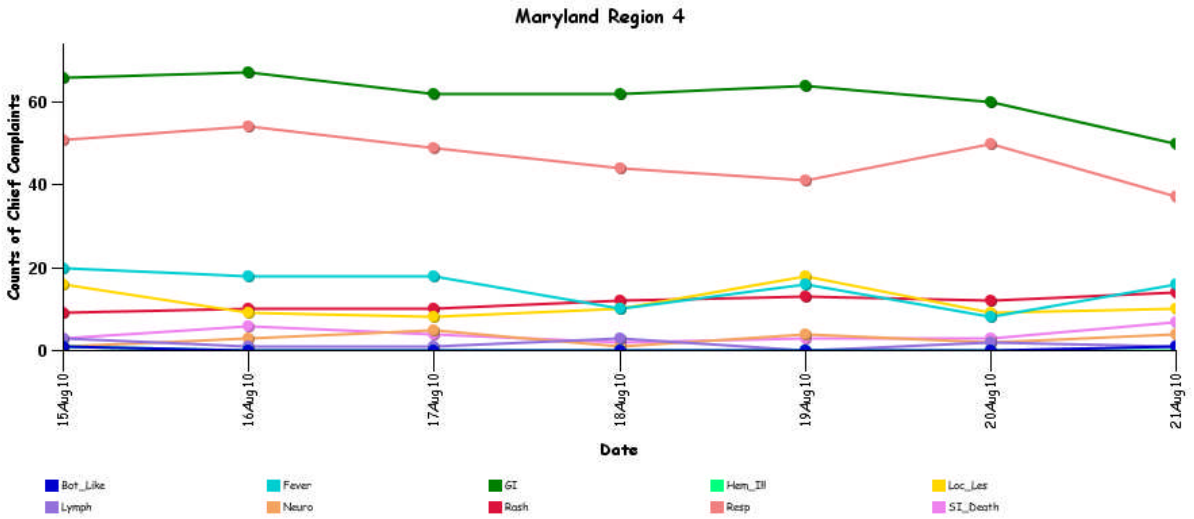

* Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE



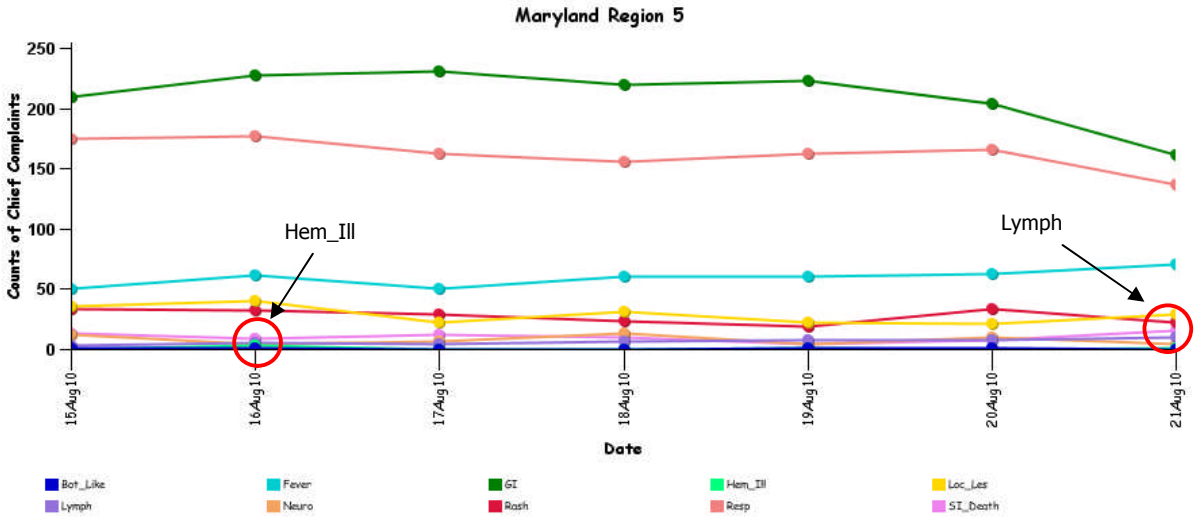

* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE




* Region 3 includes EDs in Anne Arundel, Baltimore city, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



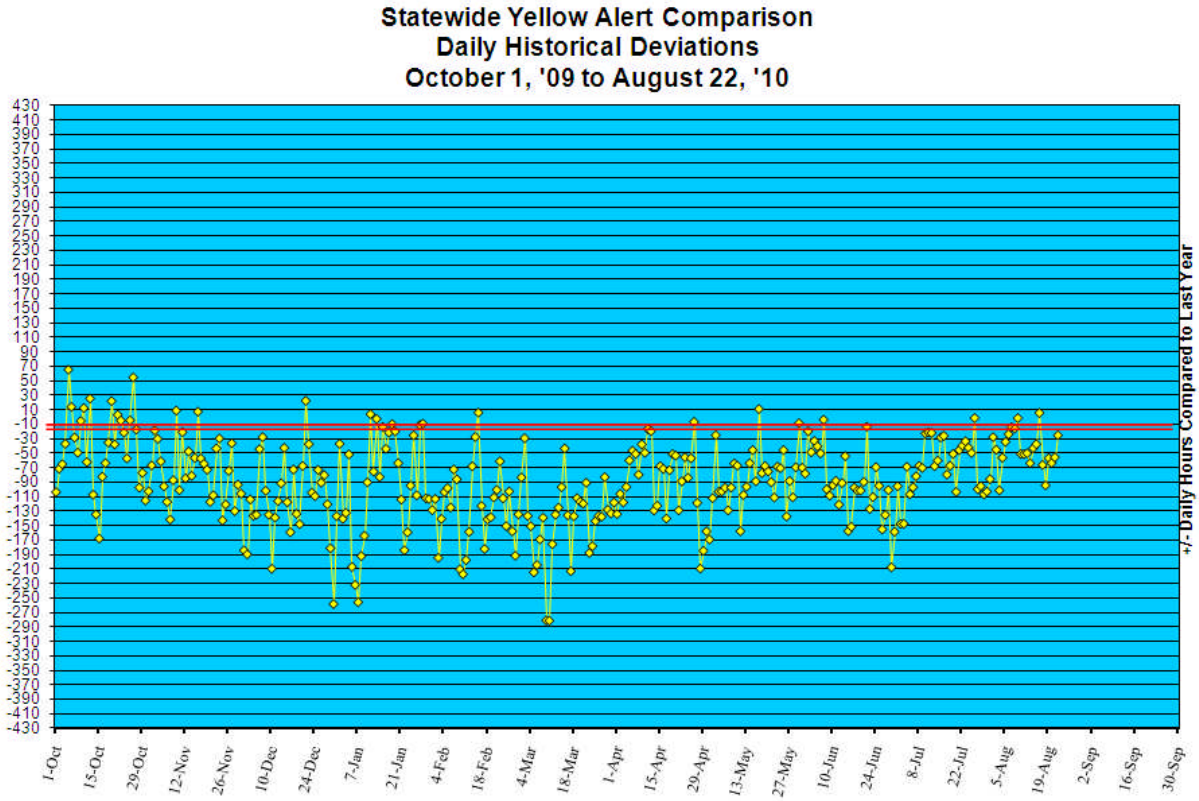

* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE




* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

## REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/09.




## REVIEW OF MORTALITY REPORTS

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

## MARYLAND TOXIDROMIC SURVEILLANCE

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in July 2010 did not identify any cases of possible public health threats.

## REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

**COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

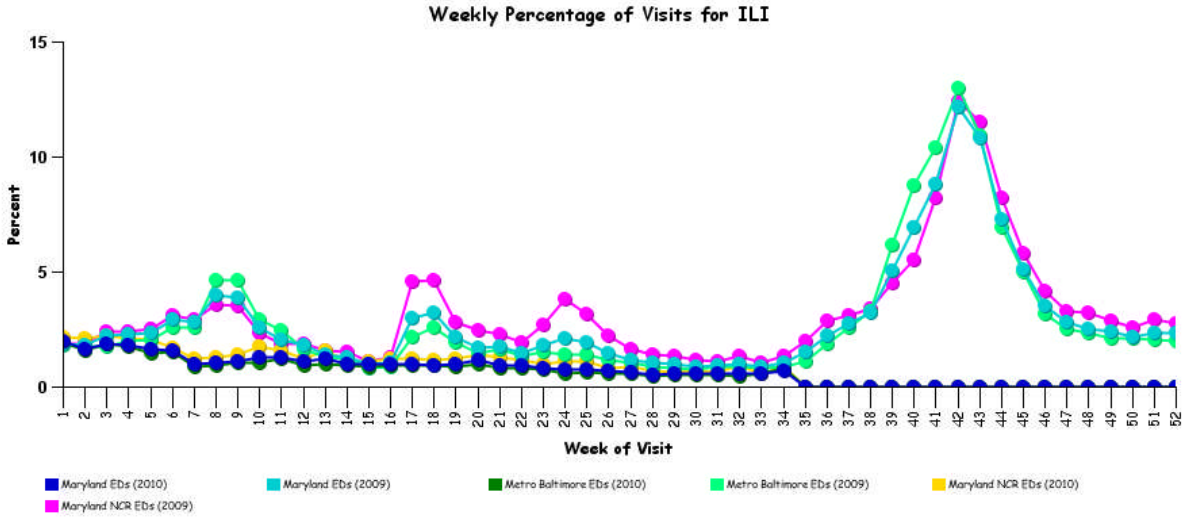
| **Meningitis:** | **Aseptic** | **Meningococcal** |
|---|---|---|
| New cases (August 15 – August 21, 2010): | 14 | 0 |
| Prior cases (August 8 – August 14, 2010): | 18 | 0 |
| Week#33, 2009 (August 16 – August 22, 2009): | 14 | 0 |

**0 outbreaks were reported to DHMH during MMWR week 33 (August 15- August 21, 2010)**

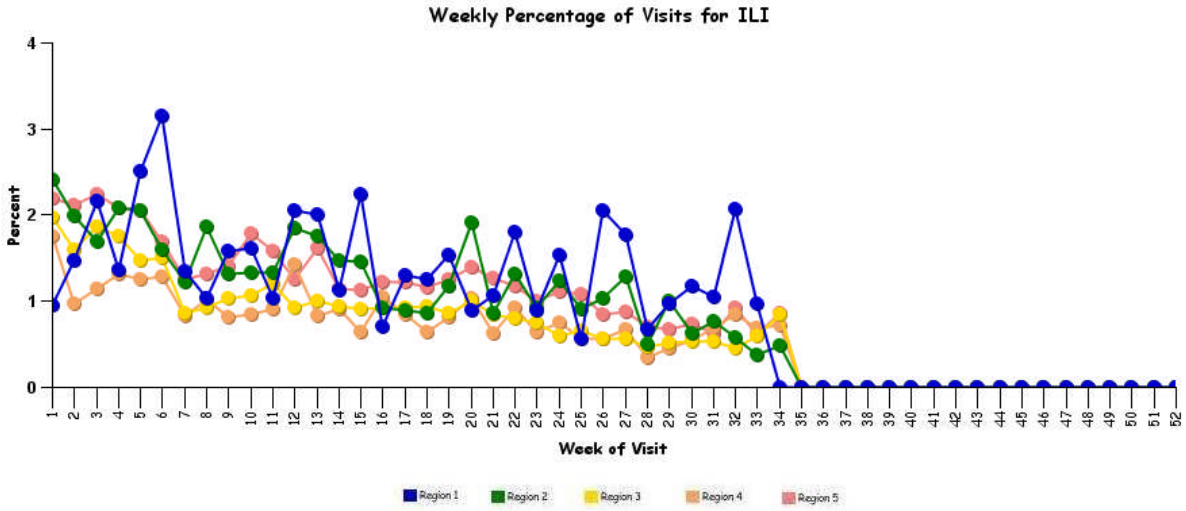
**SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS**

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



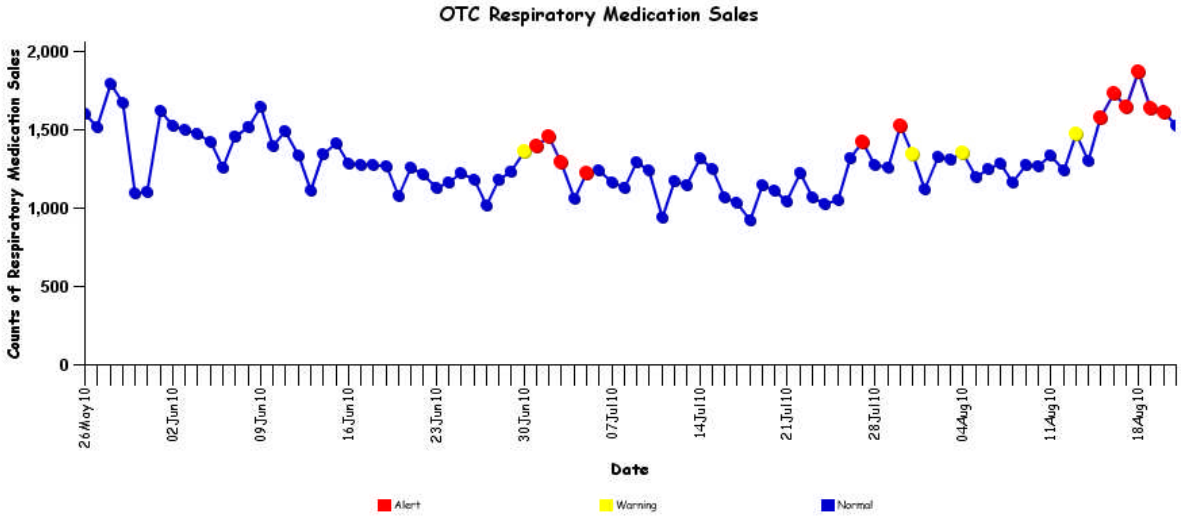

* Includes 2009 and 2010 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total




*Includes 2010 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

**OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:**

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.




**AVIAN INFLUENZA-RELATED REPORTS:**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is 3.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of August 12, 2010, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 504, of which 299 have been fatal. Thus, the case fatality rate for human H5N1 is about 59%.

**H1N1 INFLUENZA (Swine Flu):**

**INFLUENZA PANDEMIC (H1N1) WHO UPDATE:** 20 August 2010, As of 20 Aug 2010, the situation in New Zealand and India remains largely unchanged since the last update. Influenza H1N1 (2009) virus transmission remains locally intense in parts of India and New Zealand.

In New Zealand, during the 1st week of August 2010, the national consultation rate for ILI [influenza-like illness] increased sharply. Influenza H1N1 (2009) virus transmission appears to be locally intense in parts of the country that were less affected during last winter's pandemic wave; however, to date, the overall national rate of ILI consultations and the numbers of severe and fatal cases of H1N1 (2009) [virus infection] remain below levels observed during the 2009 winter pandemic wave. The majority of influenza viruses detected during the current winter epidemic have been H1N1 (2009).

In India, community transmission of H1N1 (2009) remained active and moderately intense in several states, most notably in the states of Maharashtra but also in several other western and southern states (Gujarat, Andhra Pradesh, Karnataka, and Tamil Nadu). Between mid-June 2010 and the 2nd week of August 2010, the state of Maharashtra reported consecutive weekly increases in the number of new cases, including numbers of new fatal cases; the epidemic does not appear to have peaked in Maharashtra, but the rate of increase in the numbers of new cases appears to have slowed. The epidemic appears to have stabilized or begun to decline in several other affected states. Seasonal influenza B viruses are also known to be currently circulating in India, although at lower levels than H1N1 (2009) viruses.

Except in South Africa and New Zealand, overall influenza activity and rates of respiratory diseases remained low in other countries of the temperate southern hemisphere (Australia, Chile, and Argentina). In South Africa, active circulation of seasonal influenza H3N2 and type B viruses was observed during June through mid-August 2010. In Argentina, there are unconfirmed media reports of localized influenza outbreaks in at least one part of the country.
(Countries in temperate regions are defined as those north of the Tropic of Cancer or south of the Tropic of Capricorn, while

countries in tropical regions are defined as those between these 2 latitudes).

**Resources:**

http://www.cdc.gov/h1n1flu/

http://www.dhmh.maryland.gov/swineflu/

**NATIONAL DISEASE REPORTS:**

**SALMONELLOSIS, PICKLES (ILLINOIS):** 20 August 2010, Contaminated pickles have been linked by the Cook County Department of Public Health to an outbreak of salmonellosis. According to public health officials, 6 confirmed cases of salmonellosis have been linked to pickles purchased from the Assi Market in the Chicago suburb of Niles. Five people have been hospitalized. Manager Skip Yoo said it is possible the pickles were "cross contaminated," adding store executives are cooperating with health officials. Health department officials say all confirmed victims of salmonellosis reported eating pickles made at the market and sold in plastic bags between 25-27 Jul 2010, with a 24 Aug 2010 sell-by date. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**SALMONELLOSIS, SEROTYPE ENTERITIDIS, EGGS RECALL (USA):** 20 August 2010, CDC is collaborating with public health officials in multiple states, the FDA, and the USDA's Food Safety and Inspection Service to investigate a nationwide increase of Salmonella [enteric serotype] Enteritidis (SE) infections with an indistinguishable pulsed-field gel electrophoresis (PFGE) pattern JEGXX01.0004. This is the most common PFGE pattern for SE in the PulseNet database. Investigators are using DNA analysis of Salmonella bacteria obtained through diagnostic testing to identify cases of illness that may be part of this outbreak. Because the outbreak PFGE pattern (outbreak strain) commonly occurs in the USA, some of the cases identified with this outbreak strain may not be related to this outbreak. In May 2010, CDC identified a nationwide increase in the number of S. Enteritidis isolates with PFGE pattern JEGXX01.0004 uploaded to PulseNet, the national subtyping network made up of state and local public health laboratories and federal food regulatory laboratories that performs molecular surveillance of foodborne infections. This increase is evident in the epidemic curve, or epi curve. During 1 May to 31 Jul 2010, a total of 1953 illnesses were reported. However, some of these cases may not be related to this outbreak. Based on the previous 5 years of reports to PulseNet, we would expect approximately 700 illnesses during this same period. Many states have reported increases of this pattern since May 2010. Because of the large number of expected cases during this period, standard methods of molecular subtyping alone are not sufficient to determine which reported cases might be outbreak-associated. CDC is currently conducting testing using advanced molecular methodologies to help distinguish between outbreak-related cases and sporadic (or background) cases. Illnesses that occurred after 17 Jul 2010 might not yet be reported due to the time it takes between when a person becomes ill and when the illness is reported. This takes an average of 2 to 3 weeks for Salmonella. Epidemiologic investigations conducted by public health officials in 10 states since April 2010 have identified 26 restaurants or events where more than a single ill person with the outbreak strain has eaten. Data from these investigations suggest that shell eggs are a likely source of infections in many of these restaurants or events. Preliminary information indicates that Wright County Egg, in Galt, IA, was an egg supplier in 15 of these 26 restaurants or events. A formal traceback conducted by state partners in California, Colorado, and Minnesota, in collaboration with FDA and CDC, found that shell eggs from 5 of these restaurants or events were from a single firm, Wright County Egg in Galt, IA. FDA is currently conducting an extensive investigation at the firm. The investigation includes CDC participation and involves sampling, records review and looking for potential sources of contamination, such as feed. The investigation continues, and updates will be made available. On 13 Aug 2010, Wright County Egg of Galt, Iowa conducted a nationwide voluntary recall of shell eggs. On 18 Aug 2010, Wright County Egg expanded its recall [which is now for over 380,000,000 shell eggs. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**EASTERN EQUINE ENCEPHALITIS (FLORIDA):** 18 August 2010, Four residents of Florida died from a mosquito-borne disease that usually affects horses, health officials reported Tuesday [17 Aug 2010], while the swampy state enters its high season of diseases originating in these insects [mosquitoes]. Health officials said last month [July 2010] that 2 residents in the Tampa area had died from eastern equine encephalitis [EEE], a viral disease that inflames the brain. Since then, 2 additional deaths from the disease known as EEE have been confirmed, one in Tallahassee, the state capital, and another in the town of Sopchoppy, in northwestern Florida. EEE affects mostly unvaccinated horses, and there are some human deaths each year, according to the Centers for Disease Control and Prevention (CDC). There is no vaccine for humans against the disease, which kills 1/3rd of its human victims and often leaves survivors with significant brain damage. EEE and West Nile virus have been detected in 43 of the 67 counties in Florida, according to the Department of Health. State health officials urged residents today [17 Aug 2010] to avoid contact with mosquitoes by using protective clothing and using insect repellent. They also asked property owners to remove stagnant water where mosquitoes breed. (Viral encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**INTERNATIONAL DISEASE REPORTS:**

**ENCEPHALITIS, WEST NILE VIRUS CONFIRMED (GREECE):** 21 August 2010, The number of people killed by the so-called "West Nile virus" [WN virus] in northern Greece has risen to 8, which brings to 92 the number of people infected by the bite of the

"tiger mosquito," which transmits the disease. That is the new summary of the epidemic unleashed in early August 2010, published today [20 Aug 2010] by the Greek Center for Disease Control and Prevention (KEELPNO), following the death yesterday of the 8th infected person and registration of 15 new cases of the disease. In the total of the 92 cases are included 44 patients who have been discharged, 37 hospitalized individuals -- 8 of them in intensive-care units -- and 3 infected individuals who have not been interned in hospitals, in addition to the 8 fatalities. In more than half the cases, the disease has affected the central nervous system of patients, most of whom are elderly. The West Nile virus, which is transmitted through mosquito bites, causes encephalitis. In the affected regions transfusions and blood donations have been banned. The Greek Ministry of Health has also enacted a temporary ban on the donation of blood by people who have been visiting the northern states in recent weeks. In its report today, the Prefecture of the highly touristic region of Jalkidiki says it is making progress in the campaign to eradicate the problem by the use of pesticides. (Viral encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**ANTHRAX, HUMAN, BOVINE (BANGLADESH):** 21 August 2010, At least 38 people have fallen sick after being exposed to anthrax contaminated beef in Shahjadpur upazila of Sirajganj. The people were affected after they came into contact with beef. Some of the victims might have eaten the contaminated beef, District Health Department said. Two medical teams from Dhaka visited the area on Friday [20 Aug 2010], reports our Sirajganj correspondent. Local sources said 2 sick cattle were slaughtered at Chithulia village on 27 Jul 2010, and the beef was sold among the villagers at a cheap rate. The affected villagers went to the local upazila health complex from where the civil surgeon's office raised the alarm. . (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**HEMORRHAGIC FEVER WITH RENAL SYNDROME (RUSSIA):** 18 August 2010, An increase in the incidence of hemorrhagic fever with renal syndrome (HFRS) has been observed in Tatarstan. The regional Rospotrebnadzor [Federal Agency for Human Health and Welfare] has reported that 11 cases of HFRS were recorded between 29 Jul and 6 Aug 2010, which represents 30 percent of all cases this year [2010]. Of these 11 cases, 6 people contracted HFRS infection in woodlands, one in the vicinity of a lake, one in a village, and one in a cultivated area outside a settlement. Zoologists from a regional institution conducting surveillance activities in woodland areas are forecasting an increase in the rodent population throughout Tatarstan. (Viral Hemorrhagic Fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**TICK-BORNE ENCEPHALITIS (RUSSIA):** 18 August 2010, Some 12,490 people have sustained tick bites in the Tyumen oblast Since the beginning of the epidemic season this year [2010], including 59 cases during the past week. Rospotrebnadzor [the Federal Agency for Human Health and Welfare] has announced that 345 suspected cases of tick-borne encephalitis (TBE), 63 of whom were children under 14 years of age, have been admitted to hospital. As of Thu 12 Aug 2010, the number of confirmed cases of TBE was 81, whereas during the same period last year [2009], only 45 cases were recorded. None of the cases had been immunized against TBE virus infection, and 26 percent of cases received emergency immune globulin treatment. The increase of TBE morbidity can be explained by the current abundance of ticks as a consequence of their 3-year development cycle. The regional laboratory which carries out surveys on ticks has reported that this year [2010], 5.4 percent of ticks are carrying TBE virus, and 15.2 percent are carrying Borellia (the causative agent of Lyme disease). (Viral encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**OTHER RESOURCES AND ARTICLES OF INTEREST:**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

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**NOTE**: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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